

uterus enlarged to the size of that of the fifth month of pregnancy, quite symmetrical in its outline and firm and solid to the touch. Upon passing a sound, I found the cavity measured five inches in length, and that the growth was confined for the most part to the posterior wall. It was evidently a case of interstitial fibroid tumour, and a favourable case for its removal.

I at once ordered her to take a teaspoonful of the fluid extract of ergot night and morning. At the end of ten days severe expulsive pains began in the uterus, attended with a profuse white, flaky discharge from the vagina; the ergot was discontinued, and at the end of four days the pain ceased, when the remedy was again commenced, and again with the same result; and again the need for a temporary discontinuance of treatment until the pain subsided.

The treatment was pursued as above for nearly four months, the uterus during this time steadily decreasing in size, and the watery, flaky discharge at times becoming quite profuse and somewhat offensive. The menstruation came on at the usual time and was profuse, requiring confinement to the bed and the use of cold astringent injections. At the end of four months the uterus was found to be normal in size, the menstruation was normal in quantity, and the strength was steadily improving under the use of iron and wine. She is now at this date, August, 1879, in good health, with no return of the hemorrhage. Her menstrual flow occurs regularly, and is normal.

I wish to place this case upon record as an example of the good effects of ergot upon those cases of fibrous tumours occurring in the walls of the uterus, and giving rise to troublesome hemorrhage. I think there can be no doubt that in every case where the remedy is well borne, it should be given a trial in the class of cases above mentioned before resort is had to surgical measures. It certainly is safer than any of the various operative measures in use. It is claimed that ergot acts better in these cases when given subcutaneously, but I can see no advantage in this method if the remedy is well borne by the stomach.

ARTICLE XVI.

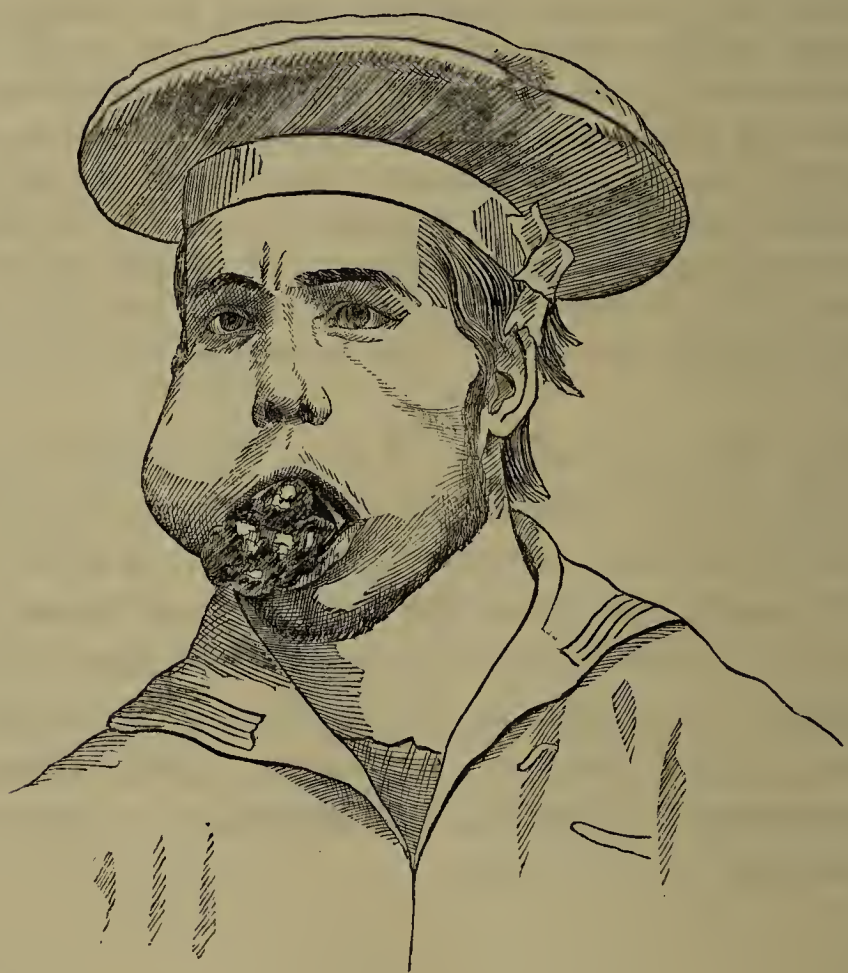
CENTRAL MYXO-SARCOMA OF THE RIGHT SUPERIOR MAXILLA; REMOVAL OF ENTIRE MAXILLA AND PORTION OF MALAR BONE. By JOHN L. NEILSON, M.D., Passed Assistant Surgeon, U. S. Navy.

ROBERT F. S., seaman, aged 20, was admitted to the New York Naval Hospital, Jan. 19, 1880, with "Sarcoma of the Upper Jaw," from the U. S. S. "Constellation," to which ship he had been transferred from the U. S. S. "Trenton," at Gibraltar, on the 10th of December, 1879, for passage to the United States.

His history previous to admission, collated from the "Hospital Ticket," which accompanied him, and from the statement of the patient, which is accepted, is as follows, viz.: About the 1st of October, 1879, without any

ascertainable cause, hereditary or otherwise, he began to have some persistent neuralgic pain in right upper jaw, radiating into ear of same side and causing some subjective noises and confusion of hearing; about the 15th of November the floor of the right antrum gave way before the protrusion of a tumour, and one week later the growth began to push through an opening made in the alveolus by the removal of a decayed molar; when, Dec. 10th, he was transferred to the "Constellation," the protruded portions were quite small, but from that time to the completion of the voyage, Jan. 19th, the growth of the tumour was exceedingly rapid, as will be seen from the accompanying illustration (Fig. 1), copied from a photograph taken the day after his admission.

Fig. 1.



On admission his condition was as follows: Right side of face corresponding to area of superior maxilla swollen and distorted, the tense integuments of the cheek discoloured and adherent at two points to the apices of nodules which could be felt through the skin; the orbital plate pushed up; the naris encroached upon and almost obliterated; the entire buccal cavity filled with a nodulated and elastic tumour, "having a firm and fleshy feel," that bulged through the mouth, and appeared externally as an offensive, bleeding mass, the size of an orange.

The mouth could be entered by raising and pushing to one side the protruding portion, when I was enabled to introduce two fingers, nearly their entire length, into the cavity of the antrum, seeming to pass between two large lobes, the removal of my fingers being followed by a stream of blood and particles of decayed bone: the odour was simply intolerable; no satisfactory exploration posteriorly could be made, but by the use of a probe, it was ascertained, with some certainty, that the almost immovable mass filling the left cavity was a portion of the original tumour, which

had bulged into the free cavity, and that the left maxilla was not implicated; on both sides the mass was so immovable, and the teeth so deeply imbedded in it, that exploration was almost impossible. The patient was fed through a tube, about the size of a No. 18 catheter, passed into the cavity of the left cheek and around the tuberosity of the maxilla.

There was remarkably little emaciation or cachexia, considering the history of the growth, and the great distress of the patient at the mechanical interference with respiration and alimentation, at the extremely foetid odour, and the constant dribbling, both into the fauces and externally, which deprived him of sleep; he had not had any pain since the protrusion of the masses through the walls of the antrum in the early weeks of the disease; submaxillary glands were not affected, vision was not impaired, and his vegetative functions were well performed.

A consultation decided upon immediate operation; accordingly, on the 21st of January, in the presence of Medical Inspector Bloodgood, and other members of my corps, and assisted by Surgeons Jones and Ayres and Passed Assistant Surgeons Anderson, DuBose, Drake, and Wilson, I removed, *en masse*, the tumour, together with the entire superior maxilla, and a portion of the malar bone—the patient, in the semi-recumbent position, being chloroformed by Dr. DuBose; the chloroform was immediately preceded by the administration of one ounce of whiskey and a half-grain of sulphate of morphia.

The incisions were as follows: Trans-facial below edge of orbit from body of malar bone to inner angle of eye, joined by a perpendicular cut following the line of the nose, and stopping just short of the gingivo-labial fold; the latter not being divided until later in the operation in order to avoid hemorrhage into the mouth; the nose and inner flap were then separated from their attachments to the bone, and the periosteum from the orbital plate sufficiently to clear the edge of the orbit and the nasal process: an attempt was now made to dissect the integuments of the cheek from the tumour, but was so seriously embarrassed by the tension of the tissues that the gingivo-labial fold was at once cut through, when the large flap was rapidly liberated from its attachments back to the tuberosity, laying bare the body of the tumour.

The periosteum was now raised from the body of the malar bone, and the encroachments of the tumour preventing a more internal section, it was cut through, and into the orbit as far as the spheno-maxillary fissure by means of a Hey's saw and bone pliers,—from here to the angle of the eye the orbital plate was broken through by a short, broad blade, and the nasal process divided with bone pliers,—extracting two incisors, the hard palate and alveolus were cut through, close to the septum, by bone pliers, and the operation completed by seizing the tumour with the lion-jawed forceps and wrenching the entire mass from its posterior connections.

The hemorrhage during the operation was comparatively trifling—no artery required ligation, and a few arterial branches were twisted. At the suggestion of Medical Inspector Bloodgood, the flaps and cavity were freely sponged with hot water with the effect to immediately stop all oozing. The patient's pulse continued good during the operation, he swallowed very little blood, did not choke, but seeming to fail just at the completion, an enema of brandy and beef essence was administered, and forty minims of whiskey hypodermically. Although the tumour was removed in twenty-eight minutes the cavity was allowed to remain open more than an hour, when, all oozing having ceased and the tissues being glazed over, the flaps

were brought into position, and retained by interrupted silk sutures, hare-lip pins, and adhesive straps. The cavity was not stuffed with pledgets of lint. The patient reacted rapidly, and before he was removed from the table was able to hold a slate and write half a dozen sentences in a firm hand. His convalescence has been rapid, five-sixths of the incision healing by first intention: vision is not impaired; there is no great deformity, and articulation, though muffled, is quite distinct.

Macroscopic Appearances.—There remained but the framework of the maxilla, the thinner portions having been so completely destroyed and replaced by the growth that the point of origin could not be determined. Where the tumour had been under pressure it was extremely firm, non-vascular, and cut crisply; where it had protruded into the free cavities, it was lobed, foliated, and cauliflower-like in appearance, and was relatively more vascular and less dense in structure; no point of ulceration except upon surface of external mass, where it had been abraded mechanically; section of the foliated masses, in the line of axis, presented, in gross appearance, the aspect of a section of the brain, the body of the convolution being nearly white, and the edge gray or mahogany coloured.

Microscopic Appearances.—Surgeons Jones and Ayres have cut, on the freezing microtome, stained and mounted, scores of sections from various portions of the tumour, and found it to be composed of every form of developmental protoplasmic body imbedded in a scanty mucoid, sometimes delicately fibrous stroma, and, at rare intervals, containing calcareous concretions.

Dr. Beyer, Assistant Surgeon U. S. Navy, kindly consented to make a critical examination and drawings of some of these sections, and his remarks are appended:—

“The tumour is built up of numerous protoplasmic bodies, which being roundish or spindle shaped, and sending offshoots in all directions, freely inosculate with each other, and produce a protoplasmic reticulum, such as is seen in developing embryonal subcutaneous tissue. The points of intersection of this reticulum are the above-mentioned elements—very often compact masses of living matter of the size of nuclei, either homogeneous, shining, or granular. In numerous places the offshoots of the elements are not protoplasmic, but slightly fibrous, indicating a more advanced stage of development of the myxomatous tissue. The meshes of the reticulum are filled with a pale, jelly-like, apparently homogeneous basis substance, refracting light very little, and filled with small, irregular protoplasmic bodies, apparently isolated, to wit, in no connection with the protoplasmic reticulum. The myxomatous tissue is traversed by a number of parallel, rather broad, bundles of fibrous connective tissue, which, perhaps, is the original fibrous tissue of the mucous membrane involved.

“The protoplasmic reticulum, with the myxomatous basis substance, fills the interstices below the bundles, and is spun around the bundles themselves. In many instances the bundles have lost their fibrous structure, and are rather protoplasmic in nature; indeed, it occurs that one and the same bundle is partly fibrous and partly protoplasmic. By the latter change either broad protoplasmic strings are produced, being in connection with the surrounding protoplasmic reticulum; or the bundle is split up into a number of small spindles, closely packed together, exhibiting the features of a so-called spindle-celled sarcoma. In numerous places the basis substance incloses bright granules of fat—so do also the protoplasmic bodies of the reticulum, indicating a rather localized fatty degeneration.

“The tumour is supplied with but few bloodvessels, mainly large capillaries, and also a few veins; in the latter the adventitial coat is exclusively built up by protoplasmic bodies more closely arranged than in the surrounding tissue.

“The diagnosis, according to Virchow’s terminology, is *myxo-sarcoma*, with transitions into net-celled sarcoma, and spindle-celled sarcoma.”

Fig. 2.



Section magnified 500 diameters. *a, a.* Protoplasmic reticulum. *b, b.* Light myxomatous basis substance. *c, c.* Isolated protoplasmic bodies in the basis substance. *d, d.* Bundles of fibrous connective tissue. *e.* Broad protoplasmic string arisen from a former connective-tissue bundle.

Remarks.—This case is thought worthy of record as a contribution to the statistics of a grave operation. It is also of interest to the histologist as a somewhat rare pathological condition.

Attention may be profitably directed to some points in the detail. It will be noticed that the cavity, left by the removal of the tumour, was not stuffed as is almost universally directed. I can see no advantage in this procedure which cannot be obtained by carefully adjusted hare-lip pins and adhesive strips, and it has the decided disadvantage of adding a direct irritant.

This case adds one more to the rapidly accumulating facts relative to the usefulness of hot water in surgery—and by *hot* water is not meant a temperature of 70°–90°, but so hot the hand can scarcely be borne in it; the application thus made is simply magical in stopping oozing, and any one who has seen the beautiful cleanliness of a large flap, and has noted the delicate pink lymph covering the same, subsequent to a *hot* cleansing, would never desire to return to cold water.

The extreme rapidity of the growth of the tumour is remarkable; that it was unaccompanied by any severe pain, or by infiltration of the neighbouring lymphatics, or by deep cachexia, and that there exists no evidence of heredity, are other interesting clinical facts which mark it off clearly

from the epithelial infiltrating class, and stamp it unmistakably as a sarcoma, a connective-tissue product.

But in noting these facts we are painfully reminded of the history of such tumours, a history which makes them scarcely less malignant than the carcinoma; we can scarcely hesitate to mentally fill out the roll of clinical sequences, and say that there will be a speedy recurrence of this tumour, and remoter secondary growths upon the internal viscera.

ARTICLE XVII.

EXTRA-UTERINE PREGNANCY; OPERATION; RECOVERY. By GEORGE P. YOUNG, M.D., of Allensville, Todd County, Kentucky.

PATIENT, wife of Chas. Small, coloured, aged twenty-five years; mother of two children, one living and five years old. Never suffered more than is usual at child-birth; has been remarkably healthy up to twelve months ago, when she began complaining of unusual pelvic and abdominal pains and uneasiness. This condition continuing and growing worse, caused her to seek the advice of a physician, who, concluding there was ulceration of the uterus, ordered the use of injections, together with a tonic. Notwithstanding the treatment she continued to grow worse, till, in May, 1879, pyrosis and sick stomach set up, which induced her to believe she was "breeding," and that there was no necessity for continuing the medicine. These symptoms soon disappeared, but the pelvic and abdominal pains continued, being intermittent, growing worse with every month; the abdomen gradually enlarging, till the middle of November, when late in the evening her pains grew so severe that she concluded she was in labour, and sent for Dr. B. M. Trabue, of this place. He remained with her during the night, and states that her pains were very severe, although he could not discover any dilatation of the os. By morning her pains had ceased altogether, and she fell into a state of collapse, and remained so for several hours, and at times was almost pulseless. About evening of the second day the patient rallied, and the Doctor continued his visits, and his patient gradually improved in strength, without a further pain or ill omen, till about the 25th December, when she began complaining of a puffing at the navel. This proved to be an ulceration, which broke about the 1st of January, 1880, discharging a quantity of purulent matter. Dr. Trabue not being satisfied with the condition of his patient, related her symptoms to me, and asked me to visit the case with him, which I did on the 4th inst., and obtained the foregoing history.

I found her with a strong and regular pulse; abdomen irregularly enlarged, with an ulcerated opening in the umbilicus, and the enlargement principally on the right side. After palpating the abdomen, I introduced a probe through the opening, extending it to the right at least five inches. It seemed to pass just under the peritoneum, and to be pressing upon a smooth, yet firm substance. I then made a digital examination per vaginam; found the broad ligament just in front, and the os uteri pushed far back into the hollow of the sacrum. I was satisfied that the case was one of extra-